

f a c s i m i l e  
T R A N S M I T T A L

Date: February 6, 2003  
No. of Pages: 12 (including this cover sheet)  
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**PLEASE DELIVER THE FOLLOWING PAGES IMMEDIATELY TO:**

Name: Commissioner for Patents  
Art Unit: 2631  
Examiner: Jean B. Corrielus  
Phone: (703) 305-4023

From: Stephen D. Burbach  
Reg. No. 40,285

Re: Application No. 10/055,120; Filed January 21, 2002  
Entitled TIMING RECOVERY SYSTEM FOR A MULTI-PAIR GIGABIT  
TRANSCEIVER

File: 47536/SDB/B600

I HEREBY CERTIFY THAT THIS PAPER IS BEING FACSIMILE TRANSMITTED TO THE  
PATENT AND TRADEMARK OFFICE ON February 6, 2003.



Deanna L. Fintz

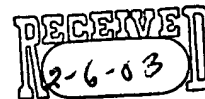
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Christie, Parker & Hale, LLP  
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Official



PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

I hereby certify that this correspondence is being sent via facsimile to the Commissioner of Patents and Trademarks, Washington, D.C. 20231 on February 6, 2003.

Signature

Applicant : Oscar E. Agazzi  
Application No. : 10/055,120  
Filed : January 21, 2002  
Title : TIMING RECOVERY SYSTEM FOR A  
MULTI-PAIR GIGABIT TRANSCEIVER  
  
Grp./Div. : 2631  
Examiner : J.B. Corrielus  
Docket No. : 47536/SDB/B600

## REQUEST FOR NEW OFFICE ACTION

Assistant Commissioner for Patents  
Washington, D.C. 20231

Post Office Box 7068  
Pasadena, CA 91109-7068  
February 6, 2003

Commissioner:

The Office action dated January 27, 2003 and attached hereto as Exhibit A, indicates that the shortened statutory period is one month. The period for reply for this Office action should be three months. Accordingly, applicant requests the Office to issue a new Office action.

Respectfully submitted,  
CHRISTIE, PARKER & HALE, LLP

By

Stephen D. Burbach  
Reg. No. 40,285  
626/795-9900

SDB/dlf

Enclosure: Exhibit A

DLF PAS187188.1--2/6/03 2:40 PM

# EXHIBIT A

FEB 01 2003

① RJP  
② SDE

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/055,120      | 01/21/2002  | Oscar E. Agazzi      | 47536/SDB/B600      | 8931             |

23363 7590 01/27/2003

CHRISTIE, PARKER & HALE, LLP  
350 WEST COLORADO BOULEVARD  
SUITE 500  
PASADENA, CA 91105

EXAMINER

CORRIELUS, JEAN B

ART UNIT

PAPER NUMBER

2631

CASE # 47536 ACTION 1 Mon OA

DATE MAILED: 01/27/2003

REMINDER DUE DATE 2/27/03DEADLINE 2/27/03

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/055,120

Applicant(s)

AGAZZI, OSCAR E.

Examiner

Jean B Corrielus

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 1/10/03.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 41-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 41-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Election/Restriction*

1. Applicant's election without traverse of claims 41-58 in Paper No. 5 is acknowledged.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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3. Claims 41-58 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 158-189 of copending Application No. 10/207,305. Although the conflicting claims are not identical, they are not patentably distinct from each other because such modification would have been obvious to one skill in the art so as to satisfy system's requirements.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

5. Claim 58 is rejected under 35 U.S.C. 102(e) as being anticipated by Brede et al US Patent No. 5,726,607.

Brede et al discloses a timing recovery system (fig. 3) for generating a set of clock signals (150 and 160) in a processing system the set of clock signals comprising a set of sampling clock signals (see fig. 1, output of divider 114) the processing system (fig. 3) comprising a set of processing subsystems (100a and 110b), each of the processing subsystems comprising an analog

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section (fig. 1 a. col. 13, lines 8-9), each of the analog sections operating in accordance with a corresponding one of the sampling clock signals (provided to element 116 and feedback to device 114), the timing recovery comprising:

a set of phase detectors (106)(Note that at col.13, lines 8-9, that Brede et al teaches that the PLL 100a is identical to PLL 100b, therefore, each element of set of devices uses the same reference number) generating phase errors for the corresponding sampling clock signals; a set of loop filters (108) coupled to the corresponding phase detectors (106), the loop filters (108) receiving the corresponding phase errors and generating filtered phase errors; a set of digital to analog converters (110) coupled to the loop filters (108), the D/A converters (110) receiving the filtered phase errors and generating analog filtered phase error; a set of oscillators (112) coupled to the corresponding D/A converters (110), the oscillators 112 receiving the analog filtered phase errors and generating the sampling clock signals.

#### *Response to Arguments*

6. Applicant's arguments filed 1/21/02 have been fully considered but they are not persuasive. It is alleged that Brede et al does not teach the generation of plural output sampling clocks. However, it is noted that fig. Shows plural output clocks. .

7. Any response to this action should be mailed to:



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Art Unit: 2631

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

(for informal or draft communications, please label "PROPOSED" or  
"DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

8. Any inquiry concerning this communication or earlier communications from the  
examiner should be directed to Jean B. Corrielus whose telephone number is (703) 305-4023.  
The examiner can normally be reached on Monday-Thursday from 7:00 A.M. to 5:30 P.M.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
supervisor, Chi Pham, can be reached on (703) 305-4378.

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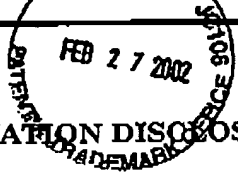
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.

 12-23-03  
Jean B. Corriellus

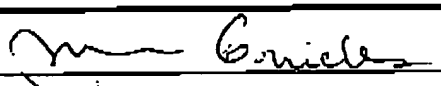
Primary Examiner

TC-2600

#3

|   |                               |                         |
|---|-------------------------------|-------------------------|
| FORM PTO-1449<br><br><b>INFORMATION DISCLOSURE</b><br><b>STATEMENT BY APPLICANT</b><br><br>(use as many sheets as necessary) | <b>Attorney Docket Number</b> | 47536/SDB/B600          |
|   | <b>Application Number</b>     | 10/055,120              |
|   | <b>Filing Date</b>            | January 21, 2002        |
|   | <b>Applicant(s)</b>           | Oscar E. Agazzi, et al. |
|   | <b>Group Art Unit</b>         | Unassigned 2631         |
|   | <b>Examiner Name</b>          | Unassigned J Corrielew  |

| OTHER DOCUMENTS   |   |
|-------------------|---|
| EXAMINER INITIALS | Include name of the author (in CAPITAL LETTERS), title of the article, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.  |
| OK                | IEEE Std 802.3ab-1999 (Supplement to IEEE Std 802.3, 1998 Edition), entitled Supplement to Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications - Physical Layer Parameters and Specifications for 1000 Mb/s Operation Over 4-Pair of Category 5 Balanced Copper Cabling, Type 1000BASE-T |
|                   | Search Report dated September 5, 2000 relating to corresponding International Application No. PCT/US00/11123, 4 pp.   |
|                   | Local and Metropolitan Area Networks, Specific Requirements, Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications; IEEE Std 802.3, 1998 Edition; pp. 893-963; LAN MAN STANDARDS COMMITTEE OF THE IEEE COMPUTER SOCIETY; USA   |
|                   | AGAZZI ET AL.; Two-Phase Decimation and Jitter Compensation in Full-Duplex Data Transceivers; Proceedings of the International Symposium on Circuits and Systems; March 10, 1992; pp. 1717-1720; IEEE; USA  |
|                   | HATAMIAN ET AL.; Design Considerations for Gigabit Ethernet 1000Base-T Twisted Pair Transceivers; 1998; pp. 335-342; IEEE 1988 Custom Integrated Circuits Conference;   |

|   |   |                        |         |
|---|---|------------------------|---------|
| <b>EXAMINER SIGNATURE</b>   |  | <b>DATE CONSIDERED</b> | 1-23-02 |
| <b>EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |   |                        |         |

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Technology Center 2600

#3

|  |  |                        |                         |
|--|--|------------------------|-------------------------|
| FORM PTO-1449<br><br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br>(use as many sheets as necessary) | OIP<br>FEB 27 2002<br>U.S. PATENT & TRADEMARK OFFICE | Attorney Docket Number | 47536/SDB/B600          |
|  |  | Application Number     | 10/055,120              |
|  |  | Filing Date            | January 21, 2002        |
|  |  | Applicant(s)           | Oscar E. Agazzi, et al. |
|  |  | Group Art Unit         | Unassigned 2631         |
|  |  | Examiner Name          | Unassigned J CORRIELOS  |

## U.S. PATENT DOCUMENTS

| EXAMINER INITIALS | DOCUMENT NUMBER | ISSUE DATE | PATENTEE          | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|-----------------|------------|-------------------|-------|----------|----------------------------|
| OK                | 4,659,999       | 04/1987    | Motoyama, et al.  | ----  | ----     |                            |
|                   | 5,128,633       | 07/1992    | Martin, et al.    | 331   | 2        |                            |
|                   | 5,142,377       | 08/1992    | Moriyama, et al.  | ----  | ----     |                            |
|                   | 5,428,361       | 06/1995    | Hightower, et al. | ----  | ----     |                            |
|                   | 5,548,249       | 03/2000    | Sumita, et al.    | 331   | 1A       |                            |
|                   | 5,572,167       | 11/1996    | Alder, et al.     | 331   | 2        |                            |
|                   | 5,644,271       | 07/1997    | Molloy, et al.    | 331   | 176      |                            |
|                   | 5,726,607       | 04/1987    | Brede, et al.     | 331   | 2        |                            |
|                   | 5,978,390       | 11/1999    | Balatoni          | 370   | 540      |                            |
| OK                | 6,041,090       | 03/2000    | Chen              | 375   | 376      |                            |
|                   |                 |            |                   |       |          |                            |
|                   |                 |            |                   |       |          |                            |
|                   |                 |            |                   |       |          |                            |
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## FOREIGN PATENT DOCUMENTS

| EXAMINER INITIALS | DOCUMENT NUMBER | PUBLICATION DATE | COUNTRY OR PATENT OFFICE | CLASS | SUBCLASS | TRANSLATION |    |
|-------------------|-----------------|------------------|--------------------------|-------|----------|-------------|----|
|                   |                 |                  |                          |       |          | YES         | NO |
| OK                | WO 98/09400     | 05/1998          | WIPO                     | H04L  | 7/02     |             |    |
| OK                | WO 99/07077     | 02/1999          | WIPO                     | H04B  |          |             |    |
|                   |                 |                  |                          |       |          |             |    |
|                   |                 |                  |                          |       |          |             |    |
|                   |                 |                  |                          |       |          |             |    |

|  |                    |                 |         |
|--|--------------------|-----------------|---------|
| EXAMINER SIGNATURE   | <i>J CorrieLOS</i> | DATE CONSIDERED | 1-23-03 |
| EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |                    |                 |         |